

FIG. 3A

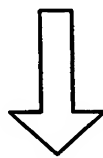
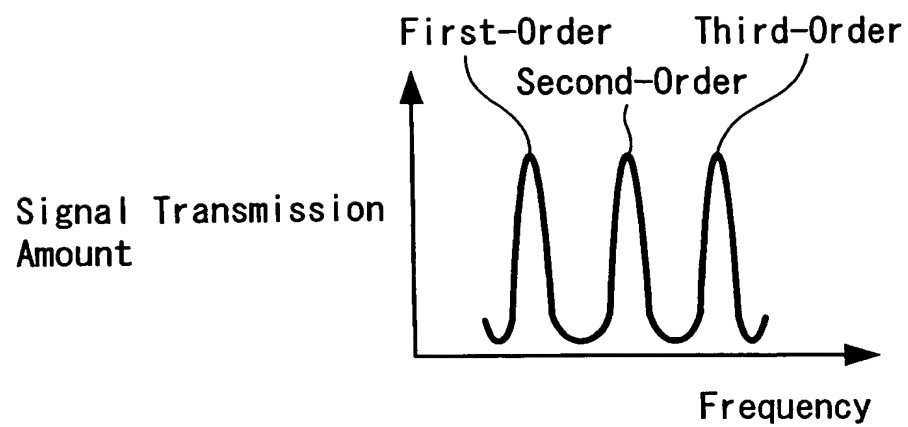


FIG. 3B

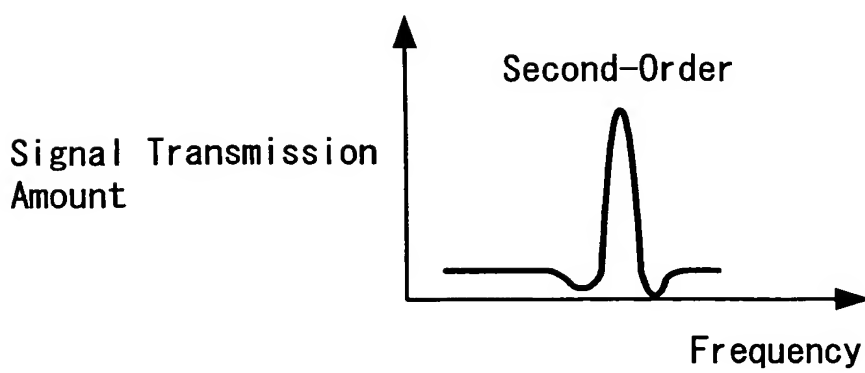


FIG. 4

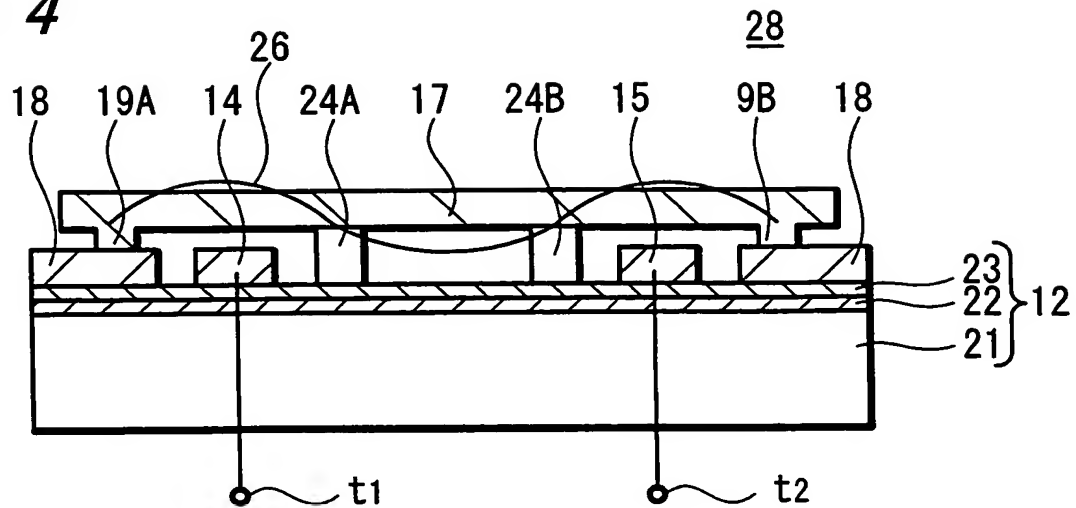


FIG. 5

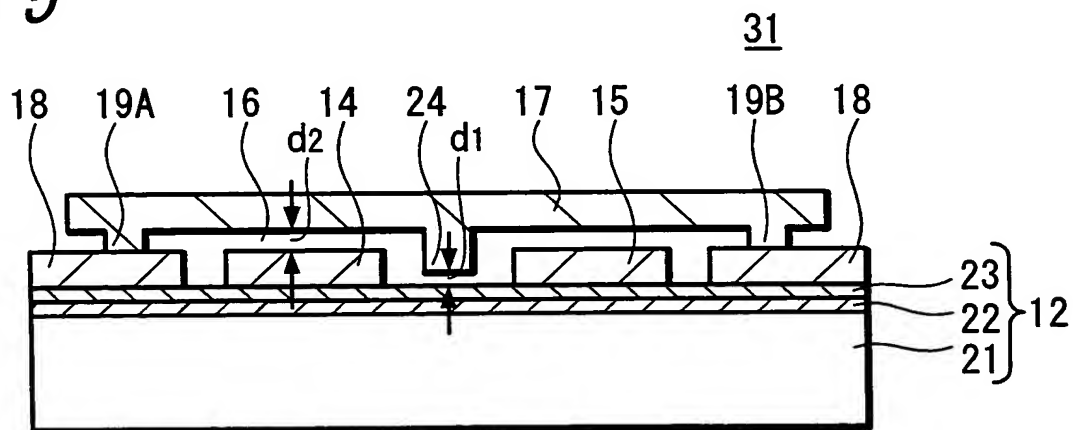


FIG. 6

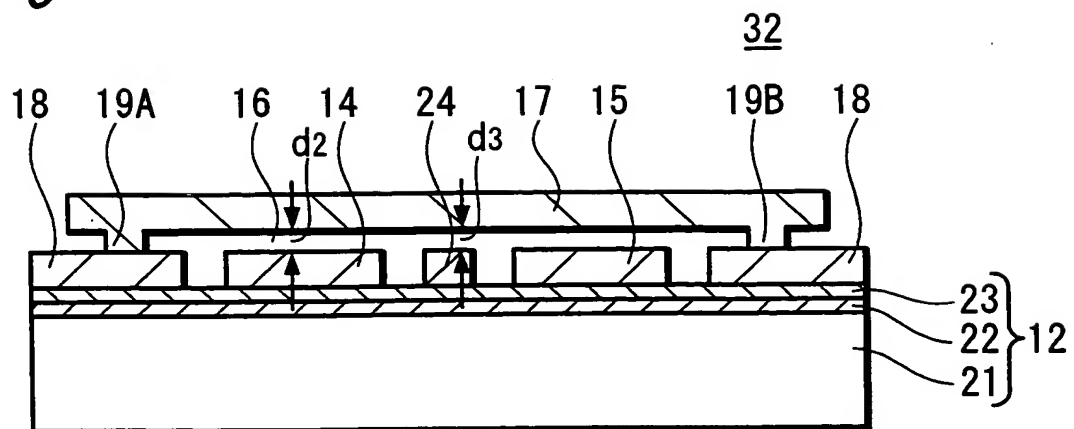


FIG. 7A

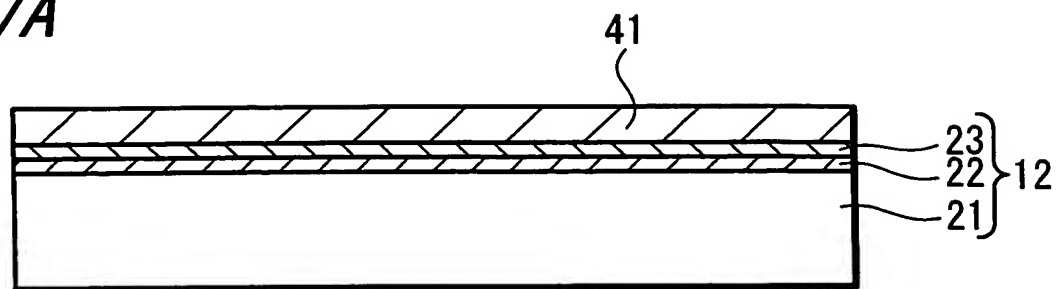


FIG. 7B

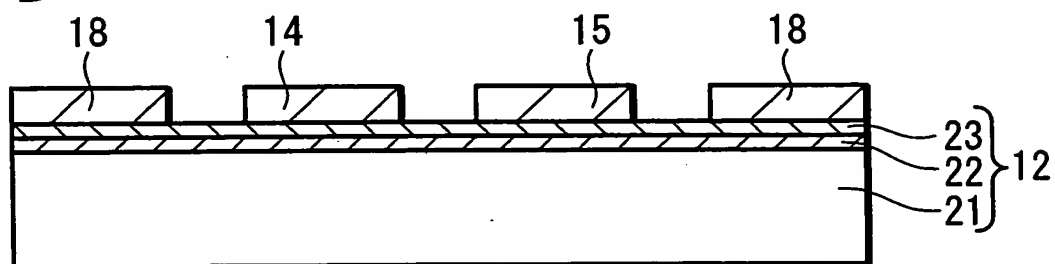


FIG. 7C

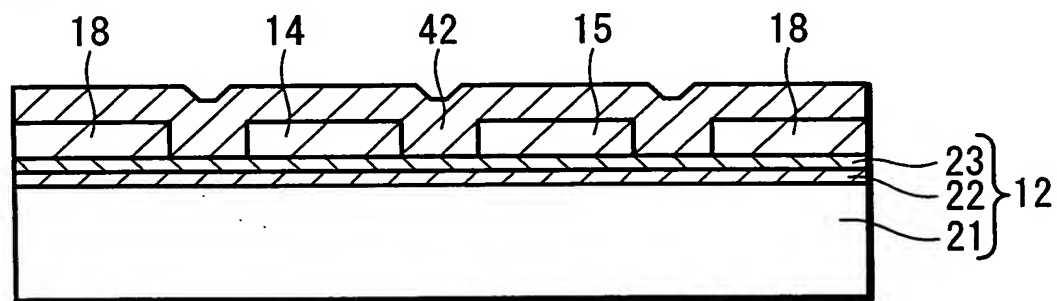


FIG. 7D

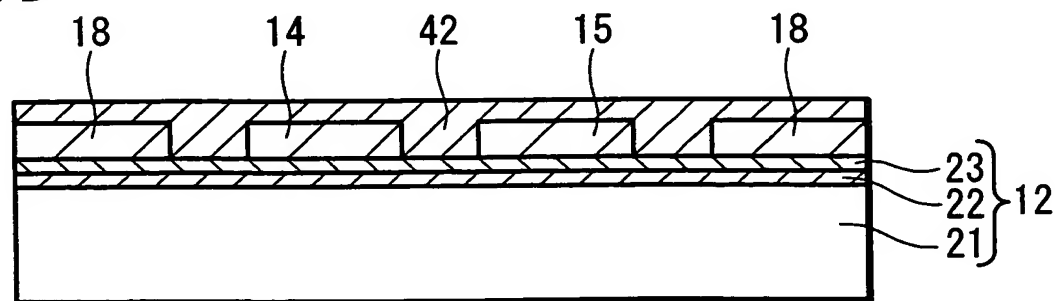


FIG. 8A

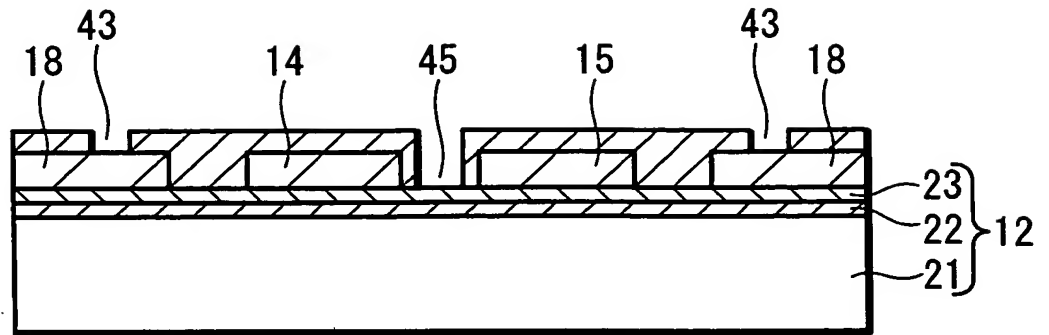


FIG. 8B

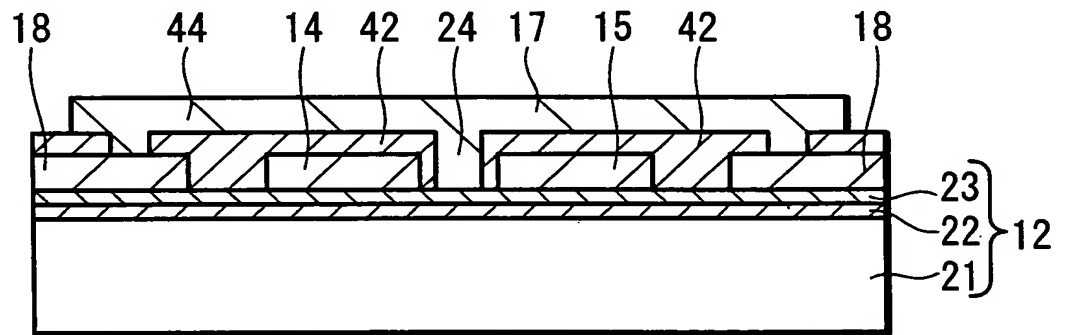


FIG. 8C

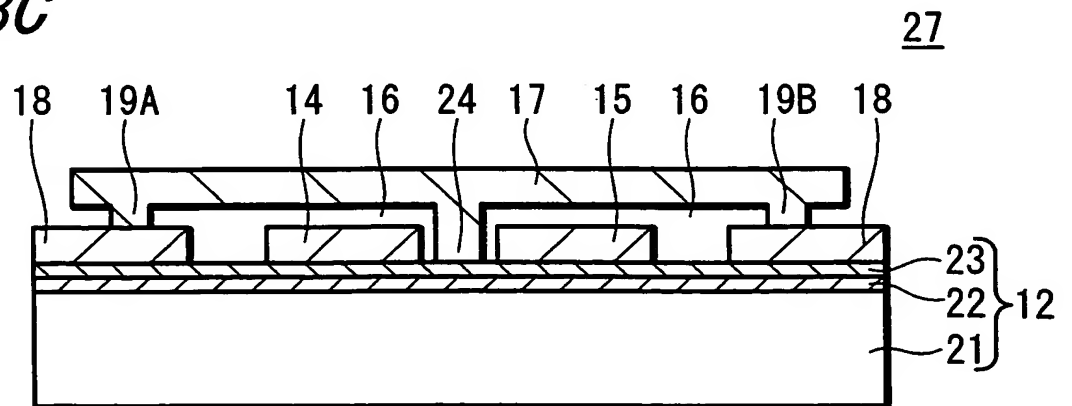


FIG. 9A

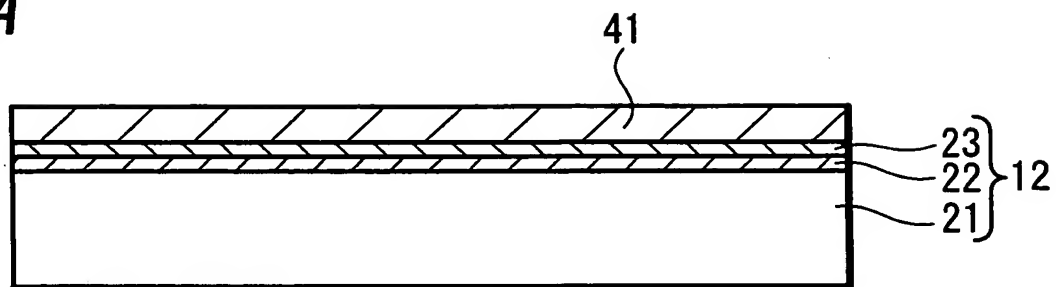


FIG. 9B

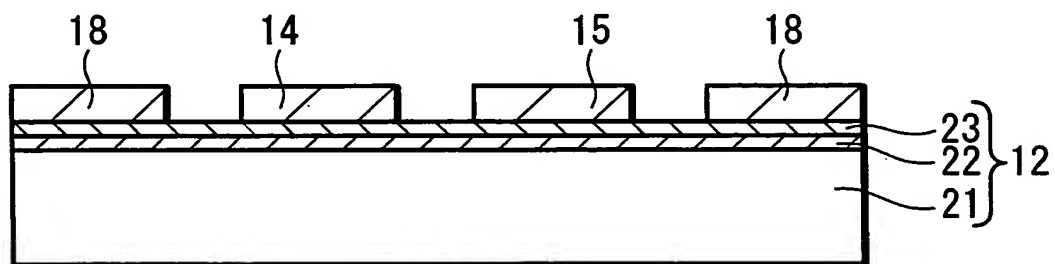


FIG. 9C

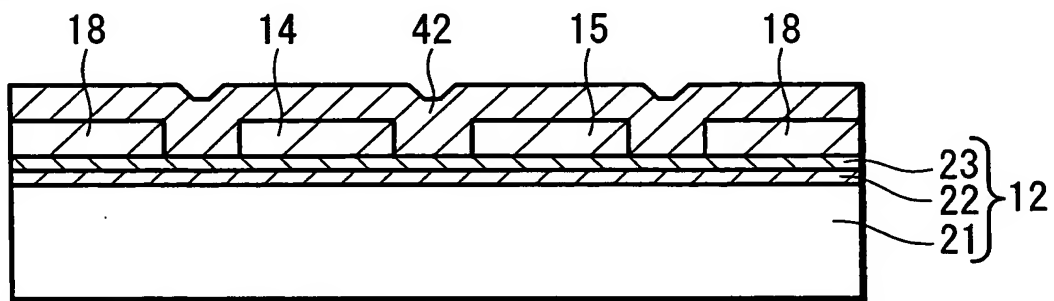


FIG. 9D

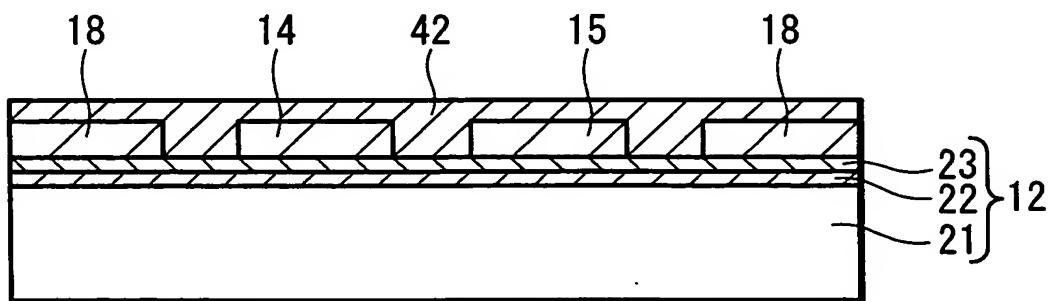


FIG. 10A

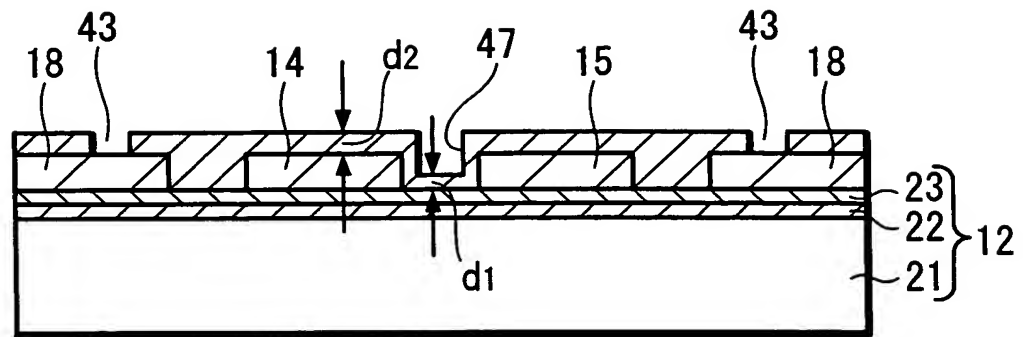


FIG. 10B

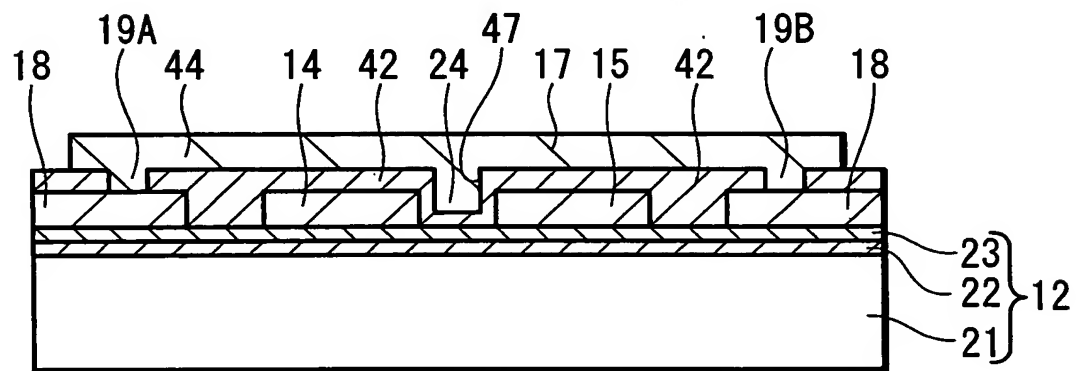


FIG. 10C

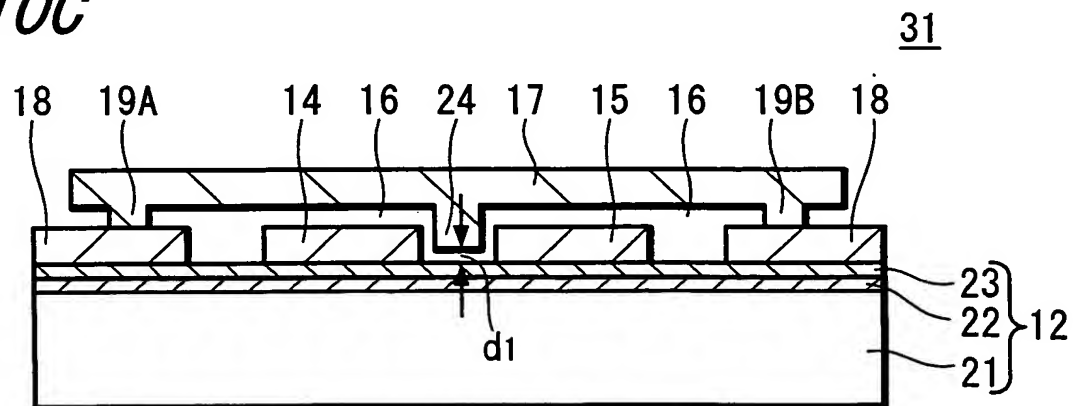


FIG. 11A

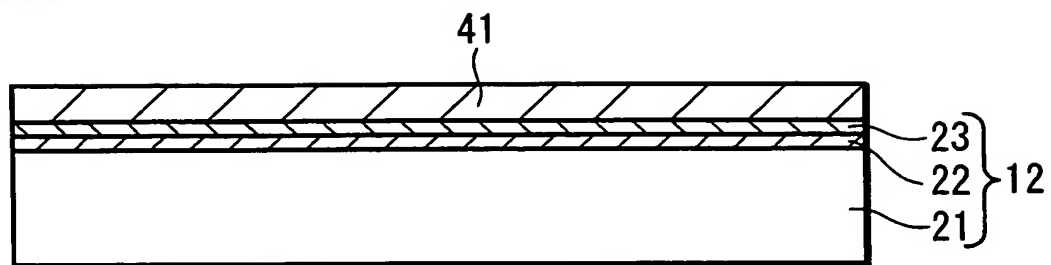


FIG. 11B

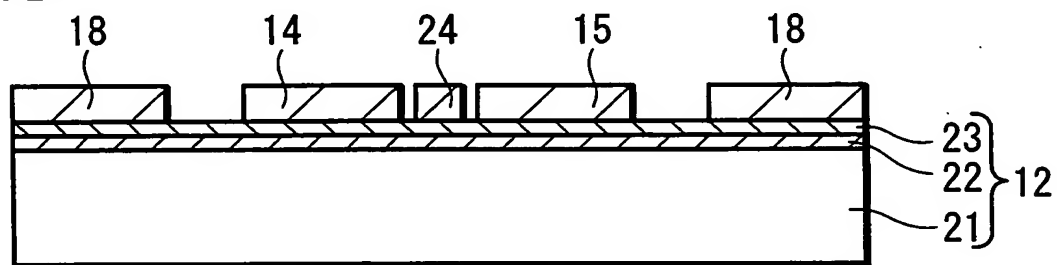


FIG. 11C

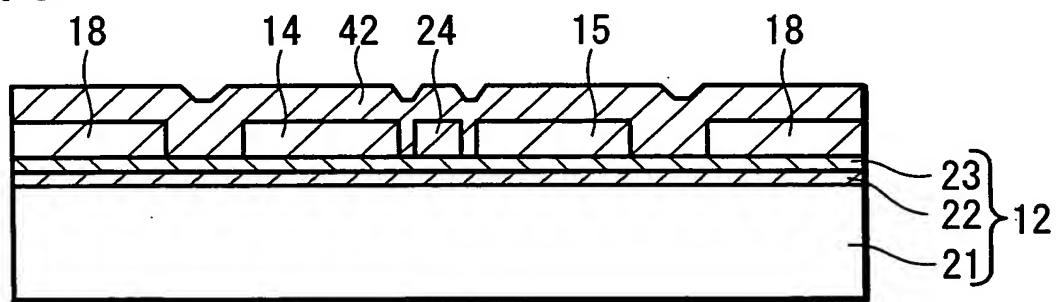


FIG. 11D

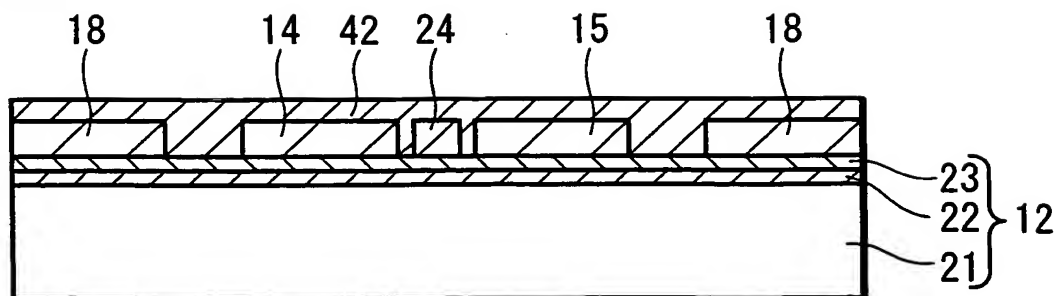


FIG. 12A

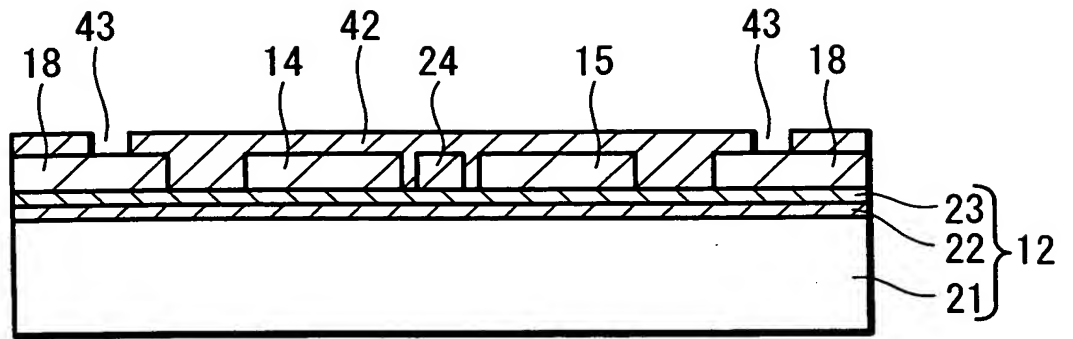


FIG. 12B

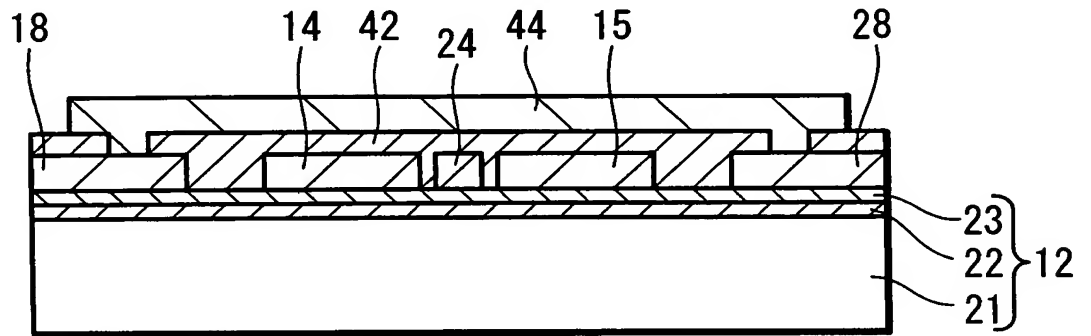


FIG. 12C

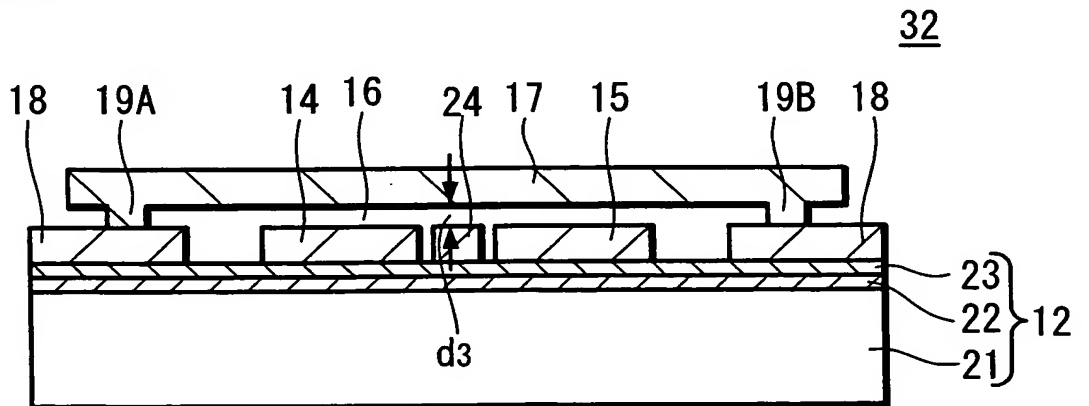


FIG. 13

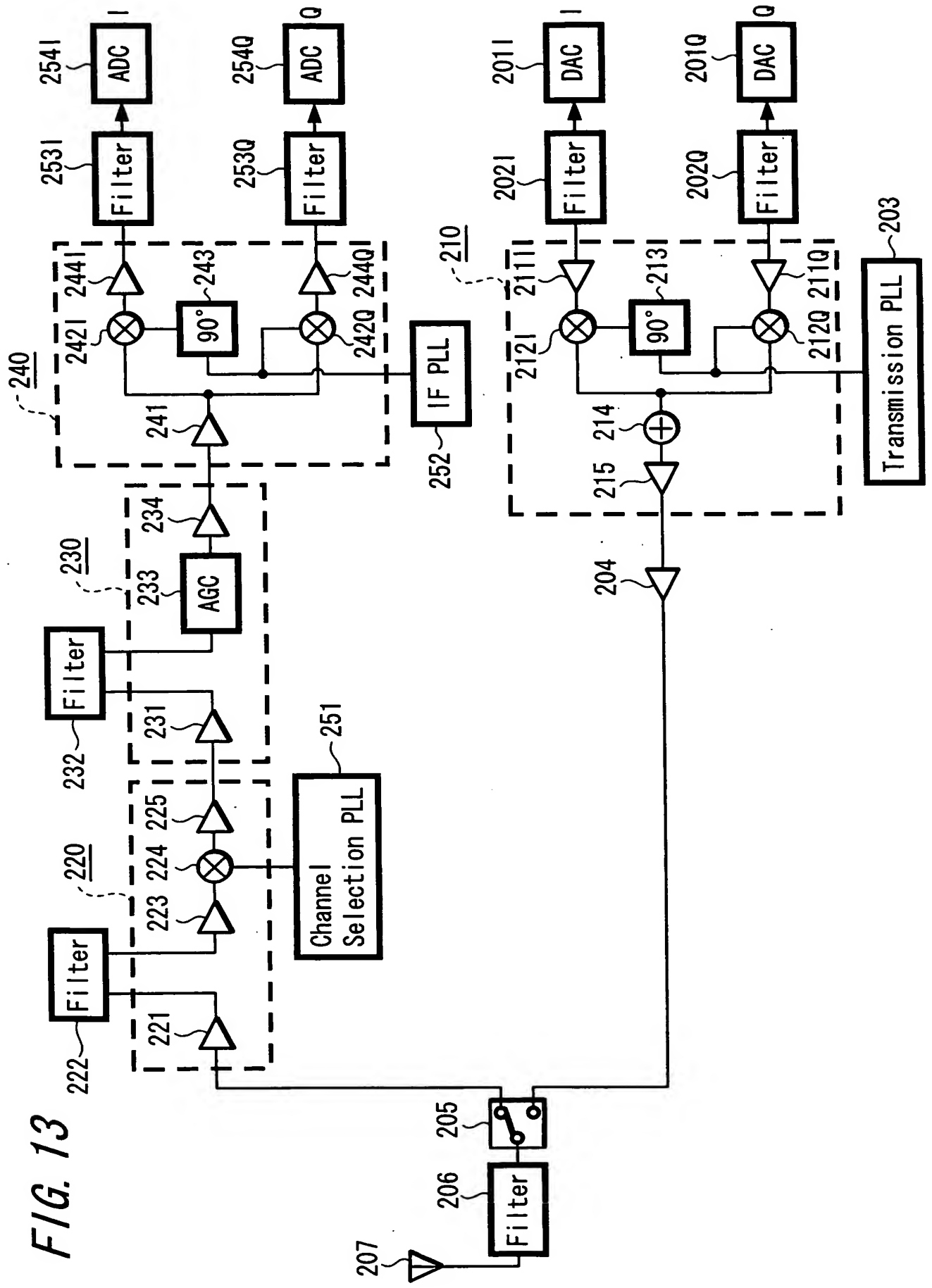


FIG. 14

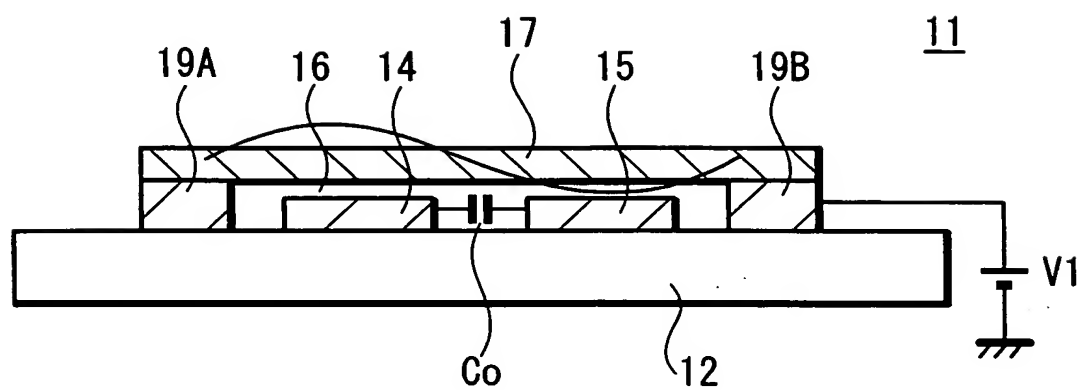
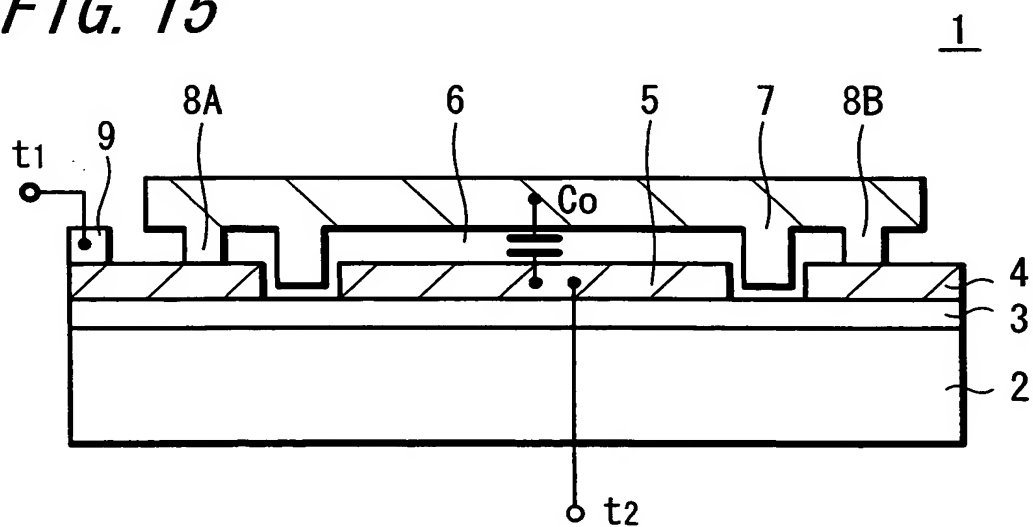


FIG. 15



DESCRIPTION OF REFERENCE NUMERALS

1 --- OSCILLATION ELEMENT
2 --- SEMICONDUCTOR SUBSTRATE
3 --- INSULATION FILM
4 --- INPUT-SIDE WIRING LAYER
11, 27, 28, 31, 32 --- MEMS RESONATOR
12 --- SUBSTRATE
14 --- INPUT ELECTRODE
5, 15 --- OUTPUT ELECTRODE
6, 16 --- SPACE
7, 17 --- OSCILLATION ELECTRODE
18 --- WIRING LAYER
8 [8A, 8B], 19 [19A, 19B] --- SUPPORT PORTION
21 --- SILICON SUBSTRATE
22 --- SILICON OXIDE FILM
23 --- SILICON NITRIDE FILM
24 [24A, 24B] --- SUPPORT COLUMN
25 --- SECOND-ORDER OSCILLATION MODE
26 --- THIRD-ORDER OSCILLATION MODE
41 --- CONDUCTIVE FILM
42 --- SACRIFICE LAYER
43 --- CONTACT HOLE
44 --- CONDUCTIVE FILM
45, 47 --- OPENING

S1 --- HIGH FREQUENCY SIGNAL
 t1 --- INPUT TERMINAL
 t2 --- OUTPUT TERMINAL
 V1 --- DC BIAS VOLTAGE
 201I, 201Q --- DIGITAL/ANALOGUE CONVERTER
 202I, 202Q, 211I, 211Q --- BAND-PASS FILTER
 210 --- MODULATOR
 212I, 212Q --- MIXER
 203 --- PLL CIRCUIT
 213 --- PHASE SHIFTER
 214 --- ADDER
 215 --- BUFFER AMPLIFIER
 204 --- POWER AMPLIFIER
 205 --- TRANSMISSION-RECEPTION SWITCHING UNIT
 206 --- HIGH FREQUENCY FILTER
 207 --- ANTENNA
 220 --- HIGH FREQUENCY PORTION
 221 --- LOW NOISE AMPLIFIER
 244I, 244Q --- BUFFER AMPLIFIER
 222, 232 --- BAND-PASS FILTER
 223, 225, 231, 234 --- BUFFER AMPLIFIER
 224 --- MIXER
 251 --- CHANNEL SELECTION PLL CIRCUIT
 233 --- AGC CIRCUIT
 240 --- DEMODULATOR

252 --- INTERMEDIATE FREQUENCY PLL CIRCUIT

242I --- MIXER

243 --- PHASE SHIFTER

253I, 253Q --- BAND-PASS FILTER

254I, 254Q --- ANALOGUE/DIGITAL CONVERTER